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10/02/2008

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EXAMINER

CATTUNGAL, SANJAY

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 06/09/08 have been fully considered but they are not persuasive. Applicant argues that the Blumenthal reference does not teach a swing mechanism for the transducer in the insertion portion. Examiner would like to point that Blumenthal reference (Fig. 1 element 16, 17, and 18) teaches a swing mechanism for the transducer in the inserting portion and a motor in the grip portion as stated in the claims. Hence all the claim limitations has been met and the rejection is maintained and is made final.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,048,529 to Blumenthal.

4. Regarding Claims 1 and 6, Bluementhal teaches an ultrasonic probe, comprising an inserting portion to be inserted into a body cavity (Col. 1 lines 40-65); and a grip portion held by an operator outside of the body cavity, wherein the inserting portion includes a transducer unit for transmitting and receiving an ultrasonic wave, a rotation axis provided in the transducer unit, and a swing mechanism for swinging the transducer unit around the rotation axis as a center axis, and the grip portion includes a

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motor for driving the swing mechanism, the swing mechanism includes a shaft connected to the motor, a first pulley provided at an end portion of the shaft different from an end portion connected to the motor, a second pulley coaxially provided at the rotation axis, and a wire connecting the first pulley and the second pulley, and rotational movement of the motor is transmitted to the transducer unit via the shaft, the first pulley, the wire, and the second pulley. (Abstract, Fig. 1-4, and Col. 1 lines 40-65)

5. Regarding claim 2, Bluementhal teaches that the first pulley and the second pulley have the same diameter. (Fig. 1)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Bluementhal in view of U. S. Patent No. 4,895,158 to Kawabuchi et al.

8. Regarding Claims 3-5, Bluementhal teaches all of the above claimed limitations but does not expressly teach that the wire is moved in a direction orthogonal to the rotation axis.

9. Kawabuchi discloses in his ultrasonic probe that the wire is moved in a direction orthogonal to the rotation axis.(Claim 1)

10. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bluementhal with a setup such that the wire is moved in a direction

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orthogonal to the rotation axis as taught by Kawabuchi, since such a setup would result in the probe being more flexible as it could be rotated in more directions and would have better control too since its done by motor/pulley system.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on 9:30 - 5:00 pm.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/  
Supervisory Patent Examiner, Art  
Unit 3737

SPC